4.3.2 PLUTONIUM CONVERSION FACILITY

The environmental impacts described in the following sections are based on the analysis of the Pu conversion facility as described in Section 2.4.2. The representative sites used for this facility are: Hanford, NTS, INEL, Pantex, ORR, and SRS. These sections describe the construction and operational impacts of the Pu conversion facility on the following potentially affected areas: land resources, site infrastructure, air quality and noise, water resources, geology and soils, biological resources, cultural and paleontological resources, socioeconomic, public and occupational health and safety, and waste management.

In accordance with the Preferred Alternative for surplus Pu disposition, the Pu conversion facility could be located at either Hanford or SRS. Further tiered NEPA review will be conducted to examine alternative locations including new and existing facilities at these two sites should the Preferred Alternative be selected at the ROD. Although new facilities are analyzed in Section 4.3.2.1 through 4.3.2.10, DOE would preserve the option for using existing facilities to the extent practical pursuant to subsequent tiered NEPA review.

4.3.2.1 Land Resources

At all sites, the Pu conversion facility would disturb 36 ha (90 acres) of land during construction of which approximately 28 ha (70 acres) would be used during operations. The facility would be sited in a 1.6-km (1-mi) buffer zone contained within the boundary except at ORR, where the buffer zone is less than 1.6 km (1 mi). With the 1.6-km (1-mi) buffer zone, total land requirement would be 1,416 ha (3,500 acres). This section describes the impacts of constructing and operating the Pu conversion facility to land resources for each analysis site.

As discussed in Section 4.3.2.8, new housing construction at all sites should be sufficient to absorb the increase in population due to the in-migration of operational workers. No in-migration would occur during construction. No offsite land use would be affected; therefore, no indirect impacts would occur.

Hanford Site

Land Use. The potential site for the Pu conversion facility would utilize vacant land in the 200 Area adjacent to 200 East. Construction and operation of the Pu conversion facility would be in conformance with existing and future land use as described in the current Hanford Site Development Plan and with ongoing discussions in the comprehensive land use planning process. According to the Hanford Site Development Plan, 200 Areas land use is identified as waste operations, which includes radioactive material management, processing, and storage (HF DOE 1993c:13,14). [Text deleted.]

Construction and operation would not affect other Hanford or offsite land uses. No prime farmlands exist onsite. Construction would be consistent with State and local (Benton, Franklin, and Grant Counties and the city of Richland) land-use plans, policies, and controls since Hanford provides information to these jurisdictions for use in their efforts to comply with the GMA (HF DOE 1993c:17).

Visual Resources. [Text deleted.] Construction and operation would be consistent with the industrialized landscape character of the 200 Areas. Construction and operation would be consistent with the current VRM Class 5 designation.

Nevada Test Site

Land Use. The potential location for the Pu conversion facility would be on undeveloped land in Area 6. Construction and operation of the facility in Area 6 would not be in conformance with the current Nevada Test Site Development Plan, which designates the southeast area of NTS as a nonnuclear test area. [Text deleted.] However, Area 6 is under a potential site for long-term storage and disposition of weapons-usable fissile materials as part of

the NTS defense program material disposition activities considered under the Expanded Use Alternative (part of the Preferred Alternative) of the NTS EIS (NT DOE 1996c:3-8-3-9; NT DOE 1996e:A-18). [Text deleted.]

Construction and operation would not affect other NTS or offsite land uses. No prime farmlands exist onsite. The alternative would not be in conflict with land-use plans, policies, and controls of adjacent jurisdictions since none of these counties and municipalities currently undertake land-use planning.

Visual Resources. [Text deleted.] Construction and operation of the facility would be compatible with the industrial landscape character of the adjacent DAF and the current VRM Class 5 designation of Area 6. Views of the proposed action would be blocked from sensitive viewpoints accessible to the public by mountainous terrain.

Idaho National Engineering Laboratory

Land Use. The proposed Pu conversion facility would be located on undeveloped land within the ICPP security area which is part of the central core area/Prime Development Land Zone of INEL (IN DOE 1992g:12). Construction and operation of the facility would be consistent with the current *Idaho National Engineering Laboratory Site Development Plan* which designates the future land use of the ICPP as receiving and storing spent nuclear fuels and radioactive wastes (IN DOE 1994d:9-8). [Text deleted.]

Construction would not affect other INEL or offsite land uses. No prime farmlands exist onsite. Construction and operation would not be in conflict with land-use plans, policies, and controls of adjacent counties and the city of Idaho Falls since they do not address the potential site.

Visual Resources. [Text deleted.] Construction and operation of the facility would be consistent with the existing industrialized landscape character of the ICPP. Construction and operation would be consistent with the current VRM Class 5 designation of the area.

Pantex Plant

Land Use. Undeveloped land in Zone 12 is the potential location for the Pu conversion facility. The potential action would be consistent with the current *Pantex Site Development Plan* master plan, which designates Zone 12 as weapons assembly/disassembly (PX DOE 1995g:16). [Text deleted.]

Construction and operation would not affect other Pantex or offsite land uses. There would be no impacts to prime farmland. The alternative would not be in conflict with the city of Amarillo's land-use plans, policies, and controls since they do not address Pantex.

Visual Resources. [Text deleted.] The proposed visual environment would be consistent with the existing industrialized landscape character. Construction and operation would be consistent with the current VRM Class 5 designation of Zone 12.

Oak Ridge Reservation

Land Use. The Pu conversion facility is proposed to be sited on undeveloped land at Y-12. Weapons component manufacturing and development is among the future land uses designated for Y-12 by the future land use plan of the current Oak Ridge Reservation Site Development and Facilities Utilization Plan (OR DOE 1989a:5-6-5-7). The alternative is compatible with the plan.

Construction and operation of the Pu conversion facility would not affect other ORR or offsite land uses. No prime farmlands exist onsite. Construction and operation would not be in conflict with the city of Oak Ridge

land-use plans, policies, and controls since the current Oak Ridge Area Land Use Plan designates the potential site for Industrial land use.

Visual Resources. Potential impacts to visual resources would not occur. The visual environment would be consistent with the existing industrial landscape character. Construction and operation would be consistent with the current VRM Class 5 designation of Y-12.

Savannah River Site

Land Use. Vacant land in the F-Area would be used for the Pu conversion facility. Construction and operation of the proposed facility would be in conformance with existing and future land use as designated by the current Savannah River Site Development Plan. According to the plan, current F-Area land use is designated industrial operations, while the future land-use category is primary industrial mission (SR DOE 1994d:11,12). Vacant land would be utilized.

Construction and operation would not affect other SRS or offsite land uses. There is no prime farmland on SRS. Construction and operation would not be in conflict with land-use plans, policies, and controls of adjacent counties and cities since they do not address SRS.

Visual Resources. [Text deleted.] The visual environment would be consistent with the industrial landscape character. Construction and operation would be consistent with current VRM Class 5 designation of the F-Area.

[Text deleted.]